



EMPLOYEE-LED ACTIVITY

Share My Career Session

Aerospace Industry

Welcome and thank you for taking the time to contribute to the education of students in your community! Sharing your knowledge of and passion for your work can be extremely valuable for students and educators. By doing so, you can inspire students to dream, set goals, focus more on their school work, and engage in and explore new subjects. You will also guide students as they begin to think about the many options they have for pursuing a career that they will enjoy, that will challenge them, and that will help support their families, communities, and the world.

EMPLOYEE INTRODUCTORY NOTES

This *Employee-Led Activity: Share My Career Session*, along with the Employee Guide, is designed to help you have a positive and meaningful experience as you share your career expertise with a group of students in your community. This session could take place at a school during a regular class period, an after-school club, an evening community night, or a career fair event.

Holding a preplanning conversation with the classroom teacher or adult facilitating the group of students is critical to ensure your session is valuable for the students. Be sure to reference the Employee Guide for helpful information to plan your school visit. The end of this document also includes sample questions students may ask of you during your visit.

This *Employee-Led Activity: Share My Career Session* could run as short as 20-30 minutes in length or extend to 45-50 minutes, depending on the time frame available to you and your preplanning with the teacher or adult facilitator.

The information below is designed to help guide your discussion with the students. There are two options presented, so you can choose what fits best for you, the students, the setting, and the time frame. You do not have to cover every topic noted below but can choose which items make the most sense given your preplanning conversations with the classroom teacher, the age/grade level of the students, and the amount of time you have for the session.

Students will value an authentic and clearly-worded presentation that engages them and inspires them to ask questions. Think of this document as a guide to help you think about your presentation, but be sure to value the preplanning session and be open to adding other elements to your session as well. Your company may also have brochures, a job-search website, summer internships, and/or other experiences/events that students would find both informative and interesting.

OPTION #1

Welcome and Introductions

5-10 Minutes

- Introduce yourself and extend a warm welcome and thanks to the students and teacher for inviting you into their classroom and school.
- Tell students they can raise their hand at any time to ask questions.
- Explain to the students what you do and who you work for (company and division in the company). Dress the part if you can. Wear your work clothes so students see how you look on an average day.
- At this stage of your introduction, consider asking: "What do you think I do in my job?" This question may spark comments from students that could reinforce correct information and/or give you a chance to correct misconceptions that students may have.
- Remember to keep the age level of the students in mind and consider whether you'll need to define any technical vocabulary to help them better understand your job. Be prepared to define words in simple, relevant, and relatable language.

Career and Job Exploration

5-10 minutes

Use this section of your presentation to dive more deeply into your career and specific job. Be prepared to explain any of the following items:

- What your company does
- Why your company's work is important and relevant
- How your company creates a benefit to the field of space and exploration
- What you specifically do in your job, and how it contributes to your company's mission
- What you like best about doing your job. (Describe a typical day, including what your responsibilities are and who you work with.)
- How you got into this area of work and some information about your career path
- What other jobs and career opportunities exist at your company
- The education and/or skills that may be required for people in your job
- What subjects from school you apply to your job
- What STEM skills—math, science, engineering, technology—you use in your job
- What other skills you apply on the job every day—such as writing, communication, reading, etc.

- Explain how your career may relate to your hobbies or interests.
- Share how you collaborate and communicate with other employees.
- Share how you use elements of art, design, creative thinking, and/or problem-solving skills in your work.

Engaging Students' Content Knowledge about Your Job

5–10 Minutes

See what students already know or think they know about your industry, career, or specific job. This section should be guided by your expertise and the important knowledge about your career and industry that you can share with students.

Share with students some basic information about the aerospace industry, such as:

- The word *aerospace* comes from the words *aeronautics* and *spaceflight*.
- The aerospace industry is responsible for all flight beyond Earth's surface, including within Earth's atmosphere and in outer space.
- People in the aerospace industry work on all aspects of designing, developing, manufacturing, operating, and maintaining aircraft and spacecraft.
- Some examples of these aircraft and spacecraft include commercial and military airplanes, gliders, blimps, drones, rockets, space launch vehicles, and space shuttles.
- The aerospace industry develops both manned and unmanned vehicles, as well as manually-driven and autonomous vehicles.
- Autonomous vehicles are able to sense their environment and drive themselves without human intervention. These vehicles enable us to explore beyond where it is currently possible for humans to travel!
- The United States' aerospace industry is the largest in the world.
- Feel free to supplement this list with additional details from your own career experience.

Ask students to answer the following questions. You can do this as a whole group, or students can work in pairs/small groups and confer with one another before sharing their answers.

- What aerospace vehicles have you seen and/or traveled in?
- Which parts of STEM apply to the aerospace field? (All! Science, Technology, Engineering, and Math!)
- How have birds inspired the aerospace industry? (Engineers use the shapes of birds as inspiration in airplane design. This is called biomimicry.)
- How does the aerospace industry affect your daily lives? (Answers include: Perhaps most obviously, the aviation sector of aerospace enables us to travel quickly to places around the world. In addition, space technology has helped scientists research, explore, and understand more about stars, planets, and our universe. We also rely on space and satellites for the Internet, our GPS systems, and cellular data—which we wouldn't have access to without the aerospace industry!)

- How could the aerospace industry affect your future?
- Do you think tourism travel to the Moon or Mars will be possible in your lifetime?
- How may the aerospace industry be connected to the world's economy? (Not only does it create a diverse range of jobs that are directly and indirectly connected to the aerospace industry, but it also supports global travel and tourism.)
- Do you know anyone who works in the aerospace field? (This is an opportunity to engage students and make connections from their experiences to your job or industry)
- How can the aerospace industry work to protect the environment? (Answers include: developing ways to minimize their carbon footprint, such as exploring the possibility of biofuels, bioremediation efforts, or giving back to local communities in other ways.)

Closure and Summary Notes

5 Minutes

When you come to the end of your session with the students, thank the students and teacher again for their time and participation. Please be sure to share resources from your company and from the STEM Careers Coalition website (stemcareerscoalition.org) that students or teachers can explore for more information.

Be prepared to share 2-3 succinct closing points that help pull together the experience for the students.

These 2–3 points could be:

- Words of encouragement to get students excited about the aerospace industry or your career.
- Specific advice to stay engaged in school and/or to seek learning opportunities about diverse topics in order to discover what students may want to consider as a career path.
- Additional resources that students could access from your company, if available, such as a website, internships, summer camps, or extension experiences to learn more about the aerospace industry.

OPTION #2

This option is designed if you know you only have 20-25 minutes to speak with students and/or if you are possibly speaking to many groups of students throughout a school day or during an after-school career fair or community night event.

Of course, you can also draw upon these ideas if you are conducting a longer session in a classroom with one group of students.

● Introduction

5 Minutes

Allow time for the students to get to know who you were when you were their age. Where did you grow up? What did you enjoy doing in middle school or high school? What were your favorite subjects in school?

● Career Path

5 Minutes

How did you transition from the middle or high school student you just described to the person you are now? What college/community college/apprenticeship/internship experiences did you learn from? When did you decide what you wanted to be when you grew up? What jobs did you have before the one you have now? Why did you decide on your career?

● Career Role

5 Minutes

What is your current job title? What does this mean? What are your day-to-day responsibilities? What problems does your job help solve? What excites you most about working in the aerospace industry? What did you learn in school that helped you in this career? Is there a subject area you wish you had learned more about in school?

● Future

5 Minutes

What do you aspire to do next? What problems do you still want to solve? What problems could the next generation of aerospace employees tackle? What does the future look like for your career? If someone wanted to pursue a career similar to yours in the aerospace industry, what advice would you give?

● Question and Answer

5 Minutes

Be sure to thank the students and teacher or adult facilitator at the end of your session. You may also share resources from your company or from the STEM Careers Coalition website (stemcareerscoalition.org) that students or teachers can explore for more information.

Samples of frequently asked questions by students:

Here are some sample questions that students may ask. It may be helpful to think about how you would answer these questions prior to your presentation.

- How long have you worked at your job?
- What projects are you working on now?
- What does your office or job site look like?
- What type of special training, if any, have you had?
- What special equipment or tools, if any, do you use?
- How many hours do you work each day?
- Do you work outside or in outer space?
- Is your job ever dangerous?
- How much money do you make? (You may not want to state your actual salary, but you can provide a salary range for jobs like yours.)
- What is the most important part of your industry?
- What do you find hardest or most challenging about your job?
- What do you really like about your job? (Have an answer prepared in advance for this question that is age-appropriate for the students with whom you are working. Older students may be interested in hearing more about research, technology advancement, innovation, and/or the creative elements of your work. Younger students may be excited to hear about the equipment you use, the places you travel to, if you know how to fly an airplane, if you have ever met a pilot or an astronaut, or what your work space looks like.)